UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OCTOBER 11, 1991

Mike Bates
State of Arkansas
Department of Pollution Control and Ecology
Hazardous Waste Division
8001 National Drive
P.O. Box 8913
Little Rock, Arkansas 72219-8913

Dear Mr. Bates:

Thank you for your letter of May 3, 1991, requesting clarification of the federal Resource Conservation and Recovery Act (RCRA) Subtitle C regulations governing the management of certain materials used as ingredients in the production of fertilizers. Your letter generated interest from a number of other agencies, to whom we are also sending copies of this response.

In your letter you request clarification of how materials and activities would be regulated under the federal regulations in a situation involving the following facts:

- A generator in your state generates a baghouse dust that is not a listed waste identified in 40 CFR 261.32 or 261.33 (or, we assume, 40 CFR 261.31);
- The baghouse dust, which has a high concentration of zinc, fails the Toxicity Characteristic for lead;
- The dust is a "sludge," as defined in 40 CFR 260.10 because it is generated in an air pollution control facility; and
- The generator would like to send the baghouse dust to a producer that could use the dust as an ingredient in fertilizer for the zinc content.

We will also address the case raised by other states in which lead is first recovered from the dust prior to its use as an ingredient in fertilizer production process.

To determine how the federal hazardous waste regulations apply to management of any material the first determination that must be made is whether the material in question is a solid waste, since by definition a hazardous waste must first be a solid waste (40 CFR 261.3). For materials that are recycled, 40 CFR 261.2(c) defines those materials that are solid wastes. If the material is both a solid

waste and a hazardous waste, the waste management activities must then be evaluated to identify applicable requirements.

In the situation that you describe, the baghouse dust would be a solid waste because it is a sludge exhibiting a characteristic of hazardous waste which is to be used to produce a product that is applied to or placed on the land (i.e., used in a manner constituting disposal). (See 40 CFR 261.2(c)(l)(i)(B).) Since the dust exhibits the Toxicity Characteristic, it is also a hazardous waste (40 CFR 261.3(a)(2(i)).

Similarly, if the baghouse dust were sent to a facility at which lead was recovered from the dust prior to shipment to the fertilizer producer, the baghouse dust would also be a solid waste under 40 CFR 261.2(c)(l)(i)(B) because it continues to be a characteristic sludge which is to be used to produce a fertilizer. This is the case because some portion of the dust is to be used in a manner constituting disposal, even though another portion (the recovered lead) will not be used in such a way. In other words, the solid waste determination for a recycled material is made at the point of generation of the waste, and takes into account the entire waste recycling process, not just the first step in a waste recycling train.

For completeness it should also be noted that the regulatory status of the dust after the lead recovery step would depend on whether the dust exhibited any hazardous waste characteristics. Thus, if the dust exhibited a characteristic it would continue to be a solid and hazardous waste, again because it would be a characteristic sludge to be used in a manner constituting disposal. On the other hand, if the dust did not exhibit any characteristics after the lead recovery step, it would not be a hazardous waste at that point.

Once the regulatory status of a recycled material is determined, the applicable management requirements are specified in 40 CFR 261.6. For the characteristic sludge which is to be used in a manner constituting disposal, the generator and any transporters would be subject to the applicable requirements of 40 CFR Parts 262, 263, and 268 (including use of the manifest), and the recycling facility (storer) to the applicable requirements of Subparts A through L of 40 CFR Parts 264 and 265 268, 270, and 124. (See 40 CFR §§ 261.6(a)(2)(i), 266.21, and 266.22. The recycling process itself (lead recovery and/or fertilizer production), assuming it is legitimate recycling, would not be subject to Subtitle C regulation.

Once the fertilizer is produced, if it meets the conditions of 40 CFR 266.20(b) (i.e., is produced for the general public's use and meets the applicable land disposal restriction, treatment standards in 40 CFR Part 268, Subpart D), the fertilizer is not presently subject to regulation (although under 40 CFR 261.2(c)(1)(i)(B) the fertilizer remains a solid waste, and 40 CFR 268.7(b)(7) recordkeeping requirements would be applicable). If the fertilizer did not meet the conditions of 40 CFR 266.20(b), use of the product would be subject to 40 CFR 266.23 (i.e., full Subtitle C regulation).

The above discussion addresses the federal regulatory requirements applicable to use of characteristic sludges as ingredients in fertilizers. However, individual state requirements may be different and may vary from state to state. Additionally, there are several follow-up points that I would like to make. First, I believe that some background on the development of the use constituting disposal

regulations will shed some light on the reason the regulations are structured as they are. When these regulations were promulgated on January 4, 1985 (50 FR 614), the preamble explained that RCRA Subtitle C jurisdiction unquestionably encompasses wastes that are placed on the land (used in a manner constituting disposal) because this type of recycling is so similar to normal forms of waste management (i.e., land disposal). In fact, placement on the land is one of the activities that Congress most clearly intended to control under RCRA. As with any other waste that is to be managed in a manner that is analogous to disposal, generation, transportation, and storage of any wastes that are (even in part) to be used to produce waste-derived products are regulated (in addition to those that are to be used directly on the land).

Second, there was a discussion in the January 4, 1985 <u>Federal Register</u> notice explaining that in the future, the Agency envisioned developing a more tailored regulatory system for waste-derived products recycled by placement on the land. Such a system would take into account the safety of the product (e.g., levels of hazardous constituents in the wastes, likely routes of exposure, etc.). We will shortly be proposing a rule that will allow producers of waste-derived products placed on the land to make such a demonstration.

Third, as you may know, this proposal is part of a larger effort that we are currently undertaking to reevaluate the overall approach to regulation of hazardous waste recycling activities and to make changes to ensure that the regulations encourage environmentally beneficial recycling. We expect to publish an Advanced Notice of Proposed Rulemaking in the <u>Federal Register</u> soon which discusses our current thinking on this issue and solicits comment on a number of possible approaches to encouraging recycling while at the same time insuring protection of human health and the environment. I strongly encourage you to review this notice and give us your thoughts on the issues discussed. The reactions and ideas of state agencies

implementing the RCRA program will be very important to the success of this project.

Thank you for bringing this issue to my attention. Should you require any further information or have any additional questions, please call Mike Petruska, Chief of the Regulatory Development Branch, at (202) 260-8551.

Sincerely,

Sylvia K. Lowrance, Director Office of Solid Waste

cc: Hazardous Waste Management Division Directors; Regions I-X

DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY

8001 NATIONAL DRIVE, P.O. BOX 8913 LITTLE ROCK, ARKANSAS 72219-8913 PHONE: (501) 562-6533 FAX: (501) 562-2541

May 3, 1991

Sylvia Lowrance Director Office of Solid Waste U. S. EPA Washington, DC 20001

Dear Ms. Lowrance:

A situation has recently been brought to my attention regarding what appears to be a substantial difference of interpretation and application of Federal Hazardous Waste regulations between our agency and that of some of our counterparts in other states. Due to the magnitude and national significance of the implications embodied in this situation, we feel that clarification of this issue is warranted from U.S. EPA headquarters.

We received a request to allow a generator in our state to ship baghouse dust to a recycling facility in another state without the use of a hazardous waste manifest. Upon investigating this request the following information was discovered:

- 1) The baghouse dust is not a "listed" waste identified in 40 CFR 261.32 or 261.33;
- 2) The dust is a "sludge" as defined in 40 CFR 260.10 (collected in an air pollution control facility);
- 3) The sludge contains high concentrations of zinc and also fails the Toxicity Characteristic for lead.
- 4) The recycling facility is a fertilizer production facility which uses the hazardous sludge as an ingredient in the process (recycling the zinc value).

The recycling facility asserts a claim that the sludge (baghouse dust) is used as a substitute for a raw material and therefore is not a "solid waste" by virtue of 40 CFR 261.2(e) (1). This claim is supported by the regulatory agency for the recycling facility's host state. Additionally, letters from several other states were presented as support for the exemption claimed.

Our response to the request to allow non-manifested shipment of the sludge was negative. We advised the generator that, based on our analysis of the facts presented and applicable regulations, we could not agree with the exemption claimed by the recycling facility. Furthermore if their sludge (baghouse dust) was shipped to the proposed recycling facility it would be considered not only a "solid waste" but also a "hazardous waste" and must be managed accordingly up to the point of entry into the recycling process at the recycling facility. We based this determination on 40 CFR 261.2(c)(1)(B) and 261.2(e)(2)(i).

As further support for our position we reference the preamble to the definition of Solid Waste, 50 FR 647, January 4, 1985. The preamble section entitled "Regulation Of The Transport and Storage Of Hazardous Waste Before Processing Of Waste-Derived Products To Be Placed On The Land" describes situations where, even though a legitimate recycling process is employed, the Agency (EPA) believed that tighter controls were warranted prior to the actual recycling (and hence no exemption from the definition of solid waste). In fact, the example given in the January 4, 1985, Federal Register notice was that of a hazardous sludge being sent to a fertilizer producer for recycling.

We have attempted to stress in our communications in this matter that our interpretation/regulatory determination is not intended as a judgment of the legitimacy of the actual recycling process. However, the management of the waste up to the point of use/reuse is subject to RCRA Subtitle C control.

In addition to generators in this state which are impacted by this situation, our state is the home of a fertilizer-producer which we have held to Subtitle C control as a TSDF.

Apparently there is significant difference in interpretation/application of the hazardous waste regulations between our State and others. This difference in interpretation has created considerable inconsistency, for example under our determination hazardous sludges being used to produce products to be placed on the land would be subject to manifesting and other Subtitle C controls including being stored in units subject to Subtitle C permitting (and associated facility-wide corrective actions). Under the opposing interpretation the material would not be considered a solid waste and thus exempt from Subtitle C regulations. The obvious economic disparity which this difference in interpretation establishes due to the added cost of compliance with the Subtitle C regulation further exacerbates this situation. This in addition to the possibility for the lack of environmental protection which compliance with the Subtitle C regulations would afford prompts the need for clarification of this issue.

Your speedy review of this situation is requested in a effort to promote national consistency in the hazardous waste program. If you or your staff should have any questions regarding this matter, Please feel free to contact me at 501-570-2891 or 501-562-6533.

Sincerely,

Mike Sates Chief Hazardous Waste Division